

REMARKS

This is in full and timely response to the non-final Official Action of September 29, 2006. Reexamination in light of the following remarks is respectfully requested. No new matter has been added.

Claims 1, 2, 5- 7 and 10 are currently pending in this application, with claim 1 being independent.

At least for the reasons set forth below, Applicants respectfully traverse the foregoing rejections. Further, Applicant believe that there are also reason other than those set forth below why the pending claims are patentable, and reserves the right to set forth those reasons, and to argue for the patentability of claims not explicitly addressed herein, in future papers.

I. Information Disclosure Statement

Applicants thank the Examiner for providing an initialed copy of forms 9 PTO/SB/08a/b, submitted by the Applicants on July 1, 2004 and April 17, 2006, respectively.

II. Rejection under 35 U.S.C. §112, second paragraph

Claims 1-10 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A. Claims 1, 2, 5, 7, and 10

By the foregoing amendment, claims 1, 2, 5, and 7 have been amended so as to overcome the objections. Therefore, withdrawal of the rejections to claims 1, 2, 5, and 7 is respectfully requested.

As to the recitation of “load circuit” in claim 10, Applicant believes that it is clear since the recitation is further recitation thereof as indicated by an article “the”. Therefore, withdrawal of the rejection is respectfully requested.

B. Claims 3, 4, 8 and 9

Claims 3, 4, and 9 have been canceled by the foregoing amendment. The objections are now moot. Therefore, withdrawal of the objections is respectfully requested.

III. Rejection under 35 U.S.C. §102

Claims 1-10 are rejected under 35 U.S.C. §102(e) as being anticipated by Sander (US Patent No. 6,737,856). The rejection is respectfully traversed for at least reasons discussed below.

As a preliminary matter, claims 3, 4, 7, and 8 have been canceled.

A. Claim 1

Claim 1 is directed to a switching circuit having a switching element, comprises a current detecting circuit having a main switch composed of MOSFET having a resistance at on-voltage, wherein a gate terminal thereof is connected to a driving circuit, and further one of a drain terminal and a source terminal thereof is connected to a fixed potential and the other terminal is connected a load circuit; a first resistance element having higher resistance value than on-resistance of the main switch; a subsidiary switch composed of MOSFET, the source terminal of which is connected to the first resistance element, an amplifier that amplifies comparatively a first resistance element voltage generated in the first resistance element and the on-voltage of the main switch and generates an output to a subsidiary switch gate terminal of the subsidiary switch; a second resistance element connected to a drain terminal of the subsidiary switch, in which a second resistance element voltage is generated according to an on-current of the main switch; and a third switch, connected between the first resistance element and the subsidiary switch in which a third switch gate terminal of the third switch is connected to the driving circuit so that a gate signal of the third switch is synchronized with that of the main switch.

Sander arguably discloses a circuit configuration for detecting the current in a load transistor.

However, Sander does not disclose, teach or suggest the features of claim 1 as amended.

Specifically, none of the applied art, alone or in combination, discloses, teaches or suggests “a third switch, connected between the first resistance element and the subsidiary switch in which a third switch gate terminal of the third switch is connected to the driving circuit so that a gate signal of the third switch is synchronized with that of the main switch”.

Thus, the applied art does not anticipate claim 1.

Support for this amendment is found in the embodiments, for example, embodiments 3 and 4). Specifically, support for the recitation of “second resistance element” and “third switch” is found in page 8, line 1 through page 9, line 25 of the specification.

Accordingly, withdrawal of this rejection and allowance of the claim is respectfully requested.

B. Claims 2, 5-7, and 10

It is respectfully submitted that since claims 2, 5-7, and 10 depend on claim 1, they are allowable for at least the reasons that claim 1 is allowable respectively and they are further allowable by reason of the additional limitations set forth therein.

C. Claims 3, 4, 8, and 9

Since claims 3, 4, 8 and 9 have been canceled by the foregoing amendment, the rejection is now moot. Therefore, withdrawal of the rejection is respectfully requested.

IV. Conclusion

In view of the above amendment, applicant believes the pending application is in condition for allowance.

Application No. 10/541,385
Amendment dated
Reply to Office Action of September 29, 2006

Docket No.: SEM-0007

The undersigned has been given limited recognition by the Director to prosecute as an attorney this application under 37 C.F.R. §10.9(a).

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 18-0013, under Order No. SEM-0007 from which the undersigned is authorized to draw.

Dated: November 29, 2006

Respectfully submitted,

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